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Minomi et al.(10) **Pub. No.: US 2017/0166898 A1**(43) **Pub. Date: Jun. 15, 2017**(54) **SIRNA STRUCTURES FOR HIGH ACTIVITY
AND REDUCED OFF TARGET**(71) Applicant: **Nitto Denko Corporation**, Osaka (JP)(72) Inventors: **Kenjiro Minomi**, Osaka (JP); **Jens Harborth**, Carlsbad, CA (US); **Cima Cina**, San Diego, CA (US); **Wenbin Ying**, San Diego, CA (US); **Jane Zheng**, Oceanside, CA (US); **Narendra Vaish**, Kirkland, WA (US)(21) Appl. No.: **15/376,633**(22) Filed: **Dec. 12, 2016****Related U.S. Application Data**

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2310/321 (2013.01)(57) **ABSTRACT**

This invention provides compounds, compositions and methods for modulating the expression of target genes using RNA interference. RNAi structures and molecules of this invention can be used for modulating or silencing the expression of genes, with high levels of RNAi activity and reduced off target actions. Advantageous structures include siRNAs targeted to any gene having one or more 2'-deoxy nucleotides located in the seed region. The RNA interference molecules can be used in methods for preventing or treating diseases.